## **ABSTRACT**

## TRIAZOLOPYRIMIDINE DERIVATIVES AS GLYCOGEN SYNTHASE KINASE 3 INHIBITORS

This invention concerns compounds of formula

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a *N*-oxide, a pharmaceutically acceptable addition salt, a quaternary amine and a stereochemically isomeric form thereof, wherein ring A represents phenyl, pyridyl, pyrimidinyl, pyridazinyl or pyrazinyl; R<sup>1</sup> represents hydrogen; aryl; formyl; C<sub>1-6</sub>alkylcarbonyl; C<sub>1-6</sub>alkylcarbonyl; C<sub>1-6</sub>alkyloxycarbonyl; C<sub>1-6</sub>alkyl substituted with formyl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkyloxycarbonyl, C<sub>1-6</sub>alkylcarbonyloxy; or optionally substituted C<sub>1-6</sub>alkyloxyC<sub>1-6</sub>alkylcarbonyl; X<sub>1</sub> represents a direct bond; -(CH<sub>2</sub>)<sub>n3</sub>- or -(CH<sub>2</sub>)<sub>n4</sub>-X<sub>1a</sub>-X<sub>1b</sub>-; R<sup>2</sup> represents optionally substituted C<sub>3-7</sub>cycloalkyl; phenyl; a 4, 5, 6- or 7-membered monocyclic heterocycle containing at least one heteroatom selected from O, S or N; benzoxazolyl or a radical of formula

 $X_2$  represents a direct bond;  $-NR^1$ -;  $-NR^1$ -( $CH_2$ )<sub>n3</sub>-; -O-; -O-( $CH_2$ )<sub>n3</sub>-; -C(=O)-;  $-C(=O)-(CH_2)_{n3}-$ ;  $-C(=O)-NR^5-(CH_2)_{n3}-$ ; -C(=S)-; -S-;  $-S(=O)_{n1}-$ ;  $-(CH_2)_{n3}-$ ;  $-(CH_2)_{n4}-X_{1a}-X_{1b}-$ ;  $-X_{1a}-X_{1b}-(CH_2)_{n4}-$ ;  $-S(=O)_{n1}-NR^5-(CH_2)_{n3}-NR^5-$  or 20  $-S(=O)_{n1}-NR^{5}-(CH_{2})_{n3}-$ ;  $R^{3}$  represents an optionally substituted 5-or 6-membered monocyclic heterocycle containing at least one heteroatom selected from O, S or N, or a 9-or 10-membered bicyclic heterocycle containing at least one heteroatom selected from O, S or N; R<sup>4</sup> represents hydrogen; halo; hydroxy; optionally substituted C<sub>1-4</sub>alkyl; optionally substituted C<sub>2-4</sub>alkenyl or C<sub>2-4</sub>alkynyl; polyhaloC<sub>1-3</sub>alkyl; 25 optionally substituted C<sub>1-4</sub>alkyloxy; polyhaloC<sub>1-3</sub>alkyloxy; C<sub>1-4</sub>alkylthio; polyhaloC<sub>1-3</sub>alkylthio; C<sub>1-4</sub>alkyloxycarbonyl; C<sub>1-4</sub>alkylcarbonyloxy; C<sub>1-4</sub>alkylcarbonyl; polyhaloC<sub>1-4</sub>alkylcarbonyl; nitro; cyano; carboxyl; NR<sup>9</sup>R<sup>10</sup>; C(=O)NR<sup>9</sup>R<sup>10</sup>;  $-NR^5-C(=O)-NR^9R^{10}; -NR^5-C(=O)-R^5; -S(=O)_{n1}-R^{11}; -NR^5-S(=O)_{n1}-R^{11}; -S-CN;$ -NR<sup>5</sup>-CN; their use, pharmaceutical compositions comprising them and processes for 30 their preparation.